



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/747,814

12/29/2003

Naruhide Kitada

9319M-000622

1894

27572 7590 09/04/2008
HARNESSE, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

KASSA, HILINA S

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

09/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/747,814	Applicant(s) KITADA ET AL.	
	Examiner HILINA S. KASSA	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/11/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/24/2008 has been entered.

Response to Arguments

2. Applicant's arguments filed on 07/24/2008 have been fully considered but they are not persuasive.

Applicant argues that neither Owa et al. nor Aoki disclose **“if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data”**.

With respect to the stated argument Aoki discloses, “if the output device receives intermediate output data which contains output conditions indicating that output should

Art Unit: 2625

be done on the output device itself (**column 13, lines 22-30; note that the print data is sent to the desired printer 40c which is designated to output the print data as also discussed in line 48-52**), the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data (**column 13, line 54-column 14, line 3; note that the outputting device i.e. printer 40c receives the image data and requests conversion process to printing data i.e. specialized data then outputs the printing data**).” It would have been obvious to one of ordinary skilled in the art to combine Owa et al. and Aoki because both are from the same field of endeavor i.e. network printing. It would have been obvious wherein if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data. The suggestion/motivation for doing so would have been to efficiently acquire a desired output and utilize different output devices and can utilize one device as desired (column 7, lines 12-16). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in the stated argument.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2625

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 10-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Owa et al. (US Patent Number 6,348,971 B2) and Aoki (US Patent Number 6,631,008 B2) and further in view of Perry (US Patent Number 7,102,778 B2).

(1) regarding claims 1:

As shown in figure 1-2, Owa et al. disclose an output device selection system (**1; figure 1**) which communicably connects a plurality of output devices and selects one of the plurality of output devices to produce output (**5, 2a, 2b, 2c, 2d, figure 1; column 3, lines 16-30; note that a host computer is connected with a plurality of printers via a communication network**), wherein:

a first output device from among the plurality of output devices comprises a specialized output data receiving section for receiving specialized output data in an output format which can be output by devices of the same type as the first output device (**column 7, lines 12-17; note that print data gets transmitted to the selected optimum printer**), and an output section for producing output based on the specialized output data received by the specialized output data receiving section (**column 7, lines 17-22; note that based on the print data the optimum printer proceeds printing**);

the output device selection system comprises an output device selection section for selecting a destination output device from among the plurality of output devices

Art Unit: 2625

(column 7, lines 26-39; note that the selection section selects an appropriate printer based upon the print data), and an intermediate output data transfer section for transferring intermediate output data of the specialized output data to the output device selected by the output device selection section **(column 7, lines 17-22; note that after the selection has been made the print data gets transmitted to the appropriate optimum printing device)**; and

a second output device other than the first output device from among the plurality of output devices comprises an intermediate output data receiving section for receiving the intermediate output data **(column 7, lines 40-47; note that after the selection has been done based on the print data, the optimum printer PRN3 gets selected as it is considered as a second output device)**, and an output section for producing output based on the specialized output data produced by the inverse data conversion section **(column 7, lines 44-47; note that printer PRN3 starts printing)**.

Owa et al. disclose all of the subject matter as described as above except for specifically teaching an inverse data conversion section for converting the intermediate output data received by the intermediate output data receiving section into specialized output data in an output format which can be output by devices of the same type as the second output device, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data.

However, Aoki discloses an inverse data conversion section for converting the intermediate output data received by the intermediate output data receiving section **(column 13, lines 65-67; note that the received image data gets converted to printing data)** into specialized output data in an output format which can be output by devices of the same type as the second output device **(column 14, lines 2-3; note that the converted data gets printed by the printer device)** and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself **(column 13, lines 22-30; note that the print data is sent to the desired printer 40c which is designated to output the print data as also discussed in line 48-52)**, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data **(column 13, line 54-column 14, line 3; note that the outputting device i.e. printer 40c receives the image data and requests conversion process to printing data i.e. specialized data then outputs the printing data).**

Owa et al. and Aoki are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have an inverse data conversion section for converting the intermediate output data received by the intermediate output data receiving section into specialized output data in an output format which can be output by devices of the same type as the second output device and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the

Art Unit: 2625

output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data. The suggestion/motivation for doing so would have been to efficiently acquire a desired output and utilize different output devices (column 7, lines 12-16). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 1.

Owa et al. and Aoki disclose all of the subject matter as described as above except for specifically teaching if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data.

However, Perry teaches if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device (**column 2, lines 1-7; note that if the first printer, or output device, is not capable to process the print job, it transfers it to the second printer based on a comparison result**), the output device transfers the resulting intermediate output data to the other output device (**column 1, lines 63-67; note that the first printer distributes or transfers the print job to the second printer based on the capabilities**), and if the output device

Art Unit: 2625

receives specialized output data which contains output conditions indicating that output should be done on the output device itself (**column 2, lines 7-10; note that when the second printer gets selected based on the capabilities, it submits the offer to the user to fulfill the print job or process the print job**), the output device does output based on the received specialized output data (**column 2, lines 1-4; note that the second printer processes or fulfills the requirements based on the received print job i.e. considered as output data**).

Owa et al., Aoki and Perry are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data. The suggestion/motivation for doing so would have been to have an efficient and reliable system that could be able to process print request without user selecting the appropriate printer. Such system also saves time (column 1, lines 24-32). Therefore, it would have been obvious to combine Owa et al. and Aoki with Perry to obtain the invention as specified in claim 1.

(2) regarding claim 2:

Owa et al. further disclose, an output device selection system (**1; figure 1**) which communicably connects a plurality of output devices and selects one of the plurality of output devices to produce output (**5, 2a, 2b, 2c, 2d, figure 1; column 3, lines 16-30; note that a host computer is connected with a plurality of printers via a communication network**), wherein:

a first output device from among the plurality of output devices comprises a specialized output data receiving section for receiving specialized output data in an output format which can be output by devices of the same type as the first output device (**column 7, lines 12-17; note that print data gets transmitted to the selected optimum printer**), an output section for producing output based on the specialized output data received by the specialized output data receiving section (**column 7, lines 17-22; note that based on the print data the optimum printer proceeds printing**); and

a second output device other than the first output device from among the plurality of output devices comprises an intermediate output data receiving section for receiving the intermediate output data (**column 7, lines 40-47; note that after the selection has been done based on the print data, the optimum printer PRN3 gets selected as it is considered as a second output device**), and an output section for producing output based on the specialized output data produced by the inverse data conversion section (**column 7, lines 44-47; note that printer PRN3 starts printing**).

Owa et al. discloses all of the subject matter as described as above except for specifically teaching (I) a data conversion section for converting the specialized output

Art Unit: 2625

data received by the specialized output data receiving section into intermediate output data; (II) an output device selection section for selecting a destination output device from among the plurality of output devices, and an intermediate output data transfer section for transferring the intermediate output data produced by the data conversion section to the output device selected by the output device selection section; and (III) an inverse data conversion section for converting the intermediate output data received by the intermediate output data receiving section into specialized output data in an output format which can be output by devices of the same type as the second output device, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data.

However, Aoki discloses (I) a data conversion section for converting the specialized output data received by the specialized output data receiving section into intermediate output data (**column 12, lines 57-65; column 14, lines 40-46**); (II) an output device selection section for selecting a destination output device from among the plurality of output devices (**column 13, lines 42-53; note that printer 40c selects other printer 40a-40b**), and an intermediate output data transfer section for transferring the intermediate output data produced by the data conversion section to the output device selected by the output device selection section (**column 13, lines 65-67; note that the data gets converted to print data**); and (III) an inverse data conversion section for converting the intermediate output data received by the intermediate output

Art Unit: 2625

data receiving section (**column 13, lines 65-67; note that the received image data gets converted to printing data**) into specialized output data in an output format which can be output by devices of the same type as the second output device (**column 14, lines 2-3; note that the converted data gets printed by the printer device**) and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself (**column 13, lines 22-30; note that the print data is sent to the desired printer 40c which is designated to output the print data as also discussed in line 48-52**), the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data (**column 13, line 54-column 14, line 3; note that the outputting device i.e. printer 40c receives the image data and requests conversion process to printing data i.e. specialized data then outputs the printing data**).

Owa et al. and Aoki are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have (I) a data conversion section for converting the specialized output data received by the specialized output data receiving section into intermediate output data; (II) an output device selection section for selecting a destination output device from among the plurality of output devices, and an intermediate output data transfer section for transferring the intermediate output data produced by the data conversion section to the output device selected by the output device selection section; and (III) an inverse data conversion section for converting the

Art Unit: 2625

intermediate output data received by the intermediate output data receiving section into specialized output data in an output format which can be output by devices of the same type as the second output device, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data. The suggestion/motivation for doing so would have been to efficiently acquire a desired output and utilize different output devices (column 7, lines 12-16). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 2.

Owa et al. and Aoki disclose all of the subject matter as described as above except for specifically teaching if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data.

However, Perry teaches if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device (**column 2, lines 1-7; note that if the first printer, or output device, is not capable to process the print**

Art Unit: 2625

job, it transfers it to the second printer based on a comparison result), the output device transfers the resulting intermediate output data to the other output device **(column 1, lines 63-67; note that the first printer distributes or transfers the print job to the second printer based on the capabilities),** and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself **(column 2, lines 7-10; note that when the second printer gets selected based on the capabilities, it submits the offer to the user to fulfill the print job or process the print job),** the output device does output based on the received specialized output data **(column 2, lines 1-4; note that the second printer processes or fulfills the requirements based on the received print job i.e. considered as output data).**

Owa et al., Aoki and Perry are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data. The suggestion/motivation for doing so would have been to have an efficient and reliable system that could be able to process print request without user selecting the appropriate printer. Such system also

saves time (column 1, lines 24-32). Therefore, it would have been obvious to combine Owa et al. and Aoki with Perry to obtain the invention as specified in claim 2.

(3) regarding claim 3:

Owa et al. further disclose a printer selection system (**1, figure 1**) which communicably connects a plurality of network printers and selects one of the plurality of network printers in response to a print request from a print request terminal (**5, 2a, 2b, 2c, 2d, figure 1**), wherein:

the network printer comprises a specialized print data receiving section for receiving specialized print data in a print format which can be printed by devices of the same type as the one network printer (**column 7, lines 12-17; note that print data gets transmitted to the selected optimum printer**), a network printer selection section for selecting a destination network printer from among the plurality of network printers (**column 7, lines 17-22; note that based on the print data the optimum printer proceeds printing**), an intermediate print data transfer section for transferring the intermediate print data produced by the data conversion section to the network printer selected by the network printer selection section (**column 7, lines 17-22; note that after the selection has been made the print data gets transmitted to the appropriate optimum printing device**), an inverse data conversion section for converting the intermediate print data received by the intermediate print data receiving section into the specialized print data (**column 7, lines 40-47; note that after the selection has been done based on the print data, the optimum printer PRN3 gets**

selected as it is considered as a second output device), and a printing section for printing based on at least one of the specialized print data received by the specialized print data receiving section and the specialized print data produced by the inverse data conversion section (**column 7, lines 44-47; note that printer PRN3 starts printing**); and

the data conversion section (**column 8, lines 44-47**), the network printer selection section (**column 8, lines 30-38**), and the intermediate print data transfer section operate based on predetermined printing conditions (**column 8, lines 40-44**).

Owe et al. disclose all of the subject matter as described as above except for specifically teaching an intermediate print data receiving section for receiving the intermediate print data, a data conversion section for converting the specialized print data received by the specialized print data receiving section into intermediate print data, a network printer selection section for selecting a destination network printer from among the plurality of network printers, and if the network printer receives intermediate print data which contains printing conditions indicating that printing should be done on the network printer itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized print data.

However, Aoki discloses an intermediate print data receiving section for receiving the intermediate print data (**column 13, line 65-67; note that the received image data gets converted to printing data**), a data conversion section for converting the specialized print data received by the specialized print data receiving section into

Art Unit: 2625

intermediate print data (**column 13, lines 65-67; note that the received image data gets converted to printing data**), and if the network printer receives intermediate print data which contains printing conditions indicating that printing should be done on the network printer itself (**column 13, lines 22-30; note that the print data is sent to the desired printer 40c which is designated to output the print data as also discussed in line 48-52**), the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized print data (**column 13, line 54-column 14, line 3; note that the outputting device i.e. printer 40c receives the image data and requests conversion process to printing data i.e. specialized data then outputs the printing data**).

.Owa et al. and Aoki are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have an intermediate print data receiving section for receiving the intermediate print data, a data conversion section for converting the specialized print data received by the specialized print data receiving section into intermediate print data, and if the network printer receives intermediate print data which contains printing conditions indicating that printing should be done on the network printer itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized print data. The suggestion/motivation for doing so would have been to efficiently acquire a desired output and utilize different output devices (column 7, lines 12-16). Therefore, it would

have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 3.

Owa et al. and Aoki disclose all of the subject matter as described as above except for specifically teaching if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data.

However, Perry teaches if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device (**column 2, lines 1-7; note that if the first printer, or output device, is not capable to process the print job, it transfers it to the second printer based on a comparison result**), the output device transfers the resulting intermediate output data to the other output device (**column 1, lines 63-67; note that the first printer distributes or transfers the print job to the second printer based on the capabilities**), and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself (**column 2, lines 7-10; note that when the second printer gets selected based on the capabilities, it submits the offer to the user to fulfill the print job or process the print job**), the output device does output

Art Unit: 2625

based on the received specialized output data (**column 2, lines 1-4; note that the second printer processes or fulfills the requirements based on the received print job i.e. considered as output data**).

Owa et al., Aoki and Perry are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data. The suggestion/motivation for doing so would have been to have an efficient and reliable system that could be able to process print request without user selecting the appropriate printer. Such system also saves time (column 1, lines 24-32). Therefore, it would have been obvious to combine Owa et al. and Aoki with Perry to obtain the invention as specified in claim 3.

(4) regarding claim 4:

Owa et al. further disclose, the printer selection system according to claim 3, wherein:

the specialized print data contains the printing conditions (**s3, figure 6; column 5, lines 39-44**);

if the printing conditions contained in the specialized print data received by the specialized print data receiving section indicate that another one of the network printers should be used for printing (**column 5, lines 45-54**), the data conversion section (**column 8, lines 44-47**), the network printer selection section (**column 8, lines 30-38**), and the intermediate print data transfer section operate based on the received printing conditions (**column 8, lines 40-44**); and

if the printing conditions contained in the specialized print data received by the specialized print data receiving section indicate that the local network printer should be used for printing (**column 6, lines 50-65**), the printing section does printing based on the received specialized print data (**column 6, lines 37-49**).

(5) regarding claim 5:

Owa et al. further disclose, the printer selection system according to claim 4, wherein:

if the printing conditions contained in the specialized print data received by the specialized print data receiving section indicate that another one of the network printers should be used for printing (**column 6, line 66-column 7, line 11**), the network printer selection section selects the network printer indicated by the printing conditions from among the plurality of network printers (**column 7, lines 12-22**).

(6) regarding claim 6:

Owa et al. disclose most of the subject matter as described as above except for specifically teaching, the printer selection system maintains selection conditions for the network printer; and the network printer selection section selects a destination network printer from among the plurality of network printers based on the selection conditions.

However, Aoki discloses the printer selection system maintains selection conditions for the network printer (**column 13, lines 47-56**); and the network printer selection section selects a destination network printer from among the plurality of network printers based on the selection conditions (**column 13, lines 57-64**).

Owa et al. and Aoki are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have the printer selection system maintains selection conditions for the network printer; and the network printer selection section selects a destination network printer from among the plurality of network printers based on the selection conditions. The suggestion/motivation for doing so would have been to efficiently acquire a desired output and utilize different output devices (column 7, lines 12-16). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 6.

(7) regarding claim 7:

Owa et al. further disclose, the printer selection system according to claim 5, wherein: the intermediate print data contains the printing conditions (**s3, figure 6; column 5, lines 39-44**); and if the printing conditions contained in the intermediate print

data received by the intermediate print data receiving section indicate that the local network printer should be used for printing (**column 6, lines 50-65**).

Owa et al. disclose most of the subject matter as described as above except for specifically teaching the inverse data conversion section and the printing section operate based on the received intermediate print data.

However, Aoki discloses the inverse data conversion section and the printing section operate based on the received intermediate print data (**column 13, line 65-67; note that the received image data gets converted to printing data**).

Owa et al. and Aoki are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to the inverse data conversion section and the printing section operate based on the received intermediate print data. The suggestion/motivation for doing so would have been to efficiently acquire a desired output and utilize different output devices (column 7, lines 12-16). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 7.

(8) regarding claim 8:

Owa et al. disclose the printer selection system according to claim 3, wherein: when transferring print data to the other network printer (**column 6, line 66-column 6**), the specialized print data is transferred without conversion by the data conversion section if the destination network printer is of the same type as the local network printer (**column 7, lines 6-11**).

(9) regarding claim 10:

Owa et al. disclose an output device which communicably connects with a plurality of output devices (**1, 5, 2a, 2b, 2c, 2d, figure 1**), comprising:

a specialized output data receiving section for receiving specialized output data in an output format which can be output by devices of the same type as the output device (**column 7, lines 12-17; note that print data gets transmitted to the selected optimum printer**), an output section for producing output based on the specialized output data received by the specialized output data receiving section (**column 7, lines 17-22; note that based on the print data the optimum printer proceeds printing**), an output device selection section for selecting a destination output device from among the plurality of output devices (**column 7, lines 26-39; note that the selection section selects an appropriate printer based upon the print data**), and an intermediate output data transfer section for transferring intermediate output data produced by the data conversion section to the output device selected by the output device selection section (**column 7, lines 17-22; note that after the selection has been made the print data gets transmitted to the appropriate optimum printing device**).

Owa et al. disclose all of the subject matter as described as above except for specifically teaching a data conversion section for converting the specialized output data received by the specialized output data receiving section into intermediate output data, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output

device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data.

However, Aoki, discloses a data conversion section for converting the specialized output data received by the specialized output data receiving section into intermediate output data (**column 3, lines 20-32**), and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself (**column 13, lines 22-30; note that the print data is sent to the desired printer 40c which is designated to output the print data as also discussed in line 48-52**), the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data (**column 13, line 54-column 14, line 3; note that the outputting device i.e. printer 40c receives the image data and requests conversion process to printing data i.e. specialized data then outputs the printing data**).

Owa et al. and Aoki are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have a data conversion section for converting the specialized output data received by the specialized output data receiving section into intermediate output data, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data. The suggestion/motivation for doing so would have been to efficiently acquire a

Art Unit: 2625

desired output and utilize different output devices (column 7, lines 12-16). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 10.

Owa et al. and Aoki disclose all of the subject matter as described as above except for specifically teaching if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data.

However, Perry teaches if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device (**column 2, lines 1-7; note that if the first printer, or output device, is not capable to process the print job, it transfers it to the second printer based on a comparison result**), the output device transfers the resulting intermediate output data to the other output device (**column 1, lines 63-67; note that the first printer distributes or transfers the print job to the second printer based on the capabilities**), and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself (**column 2, lines 7-10; note that when the second printer gets selected based on the capabilities, it submits the offer to the**

Art Unit: 2625

user to fulfill the print job or process the print job), the output device does output based on the received specialized output data (column 2, lines 1-4; note that the second printer processes or fulfills the requirements based on the received print job i.e. considered as output data).

Owa et al., Aoki and Perry are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data. The suggestion/motivation for doing so would have been to have an efficient and reliable system that could be able to process print request without user selecting the appropriate printer. Such system also saves time (column 1, lines 24-32). Therefore, it would have been obvious to combine Owa et al. and Aoki with Perry to obtain the invention as specified in claim 10.

(9) regarding claim 11:

An output device which communicably connects with a plurality of output devices (1, 5, 2a, 2b, 2c, 2d, figure 1), comprising:

an inverse data conversion section for converting the intermediate output data received by the intermediate output data receiving section into specialized output data in an output format which can be output by devices of the same type as this output device (**column 7, lines 40-47; note that after the selection has been done based on the print data, the optimum printer PRN3 gets selected as it is considered as a second output device**), and an output section for producing output based on the specialized output data produced by the inverse data conversion section (**column 7, lines 44-47; note that printer PRN3 starts printing**).

Owe et al. disclose all of the subject matter as described as above except for specifically teaching an intermediate output data receiving section for receiving the intermediate output data, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data.

However, Aoki discloses an intermediate output data receiving section for receiving the intermediate output data (**column 13, line 65-67; note that the received image data gets converted to printing data**), and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself (**column 13, lines 22-30; note that the print data is sent to the desired printer 40c which is designated to output the print data as also discussed in line 48-52**), the output device converts the received intermediate

Art Unit: 2625

print data into specialized print data and does outputting based on the resulting specialized output data (**column 13, line 54-column 14, line 3; note that the outputting device i.e. printer 40c receives the image data and requests conversion process to printing data i.e. specialized data then outputs the printing data**) .

Owa et al. and Aoki are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have an intermediate output data receiving section for receiving the intermediate output data, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data. The suggestion/motivation for doing so would have been to efficiently acquire a desired output and utilize different output devices (column 7, lines 12-16). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 11.

Owa et al. and Aoki disclose all of the subject matter as described as above except for specifically teaching if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions

Art Unit: 2625

indicating that output should be done on the output device itself, the output device does output based on the received specialized output data.

However, Perry teaches if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device (**column 2, lines 1-7; note that if the first printer, or output device, is not capable to process the print job, it transfers it to the second printer based on a comparison result**), the output device transfers the resulting intermediate output data to the other output device (**column 1, lines 63-67; note that the first printer distributes or transfers the print job to the second printer based on the capabilities**), and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself (**column 2, lines 7-10; note that when the second printer gets selected based on the capabilities, it submits the offer to the user to fulfill the print job or process the print job**), the output device does output based on the received specialized output data (**column 2, lines 1-4; note that the second printer processes or fulfills the requirements based on the received print job i.e. considered as output data**).

Owa et al., Aoki and Perry are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output

Art Unit: 2625

device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data. The suggestion/motivation for doing so would have been to have an efficient and reliable system that could be able to process print request without user selecting the appropriate printer. Such system also saves time (column 1, lines 24-32). Therefore, it would have been obvious to combine Owa et al. and Aoki with Perry to obtain the invention as specified in claim 11.

(10) regarding claim 12:

Owa et al. further discloses a computer-readable medium having a program for an output device which communicably connects with a plurality of output devices (**1, 5, 2a, 2b, 2c, 2d, figure 1**), wherein the program makes the computer execute processes to be implemented as:

a specialized output data receiving section for receiving specialized output data in an output format which can be output by devices of the same type as the computer (**column 7, lines 12-17; note that print data gets transmitted to the selected optimum printer**), an output device selection section for selecting a destination output device from among the plurality of output devices (**column 7, lines 17-22; note that based on the print data the optimum printer proceeds printing**), and an intermediate output data transfer section for transferring intermediate output data produced by the data conversion section to the output device selected by the output

device selection section (**column 7, lines 17-22; note that after the selection has been made the print data gets transmitted to the appropriate optimum printing device**).

Owa et al. discloses all of the subject matter as described as above except for specifically teaching a data conversion section for converting the specialized output data received by the specialized output data receiving section into intermediate output data, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data.

Aoki teaches a data conversion section for converting the specialized output data received by the specialized output data receiving section into intermediate output data (**column 13, line 65-67; note that the received image data gets converted to printing data**), and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself (**column 13, lines 22-30; note that the print data is sent to the desired printer 40c which is designated to output the print data as also discussed in line 48-52**), the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data (**column 13, line 54-column 14, line 3; note that the outputting device i.e. printer 40c receives the image data and requests conversion process to printing data i.e. specialized data then outputs the printing data**).

Owa et al. and Aoki are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a data conversion section for converting the specialized output data received by the specialized output data receiving section into intermediate output data, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data. The suggestion/motivation for doing so would have been to efficiently acquire a desired output and utilize different output devices (column 7, lines 12-16). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 12.

Owa et al. and Aoki disclose all of the subject matter as described as above except for specifically teaching if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data.

However, Perry teaches if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions

Art Unit: 2625

indicating that output should be done on another output device (**column 2, lines 1-7; note that if the first printer, or output device, is not capable to process the print job, it transfers it to the second printer based on a comparison result**), the output device transfers the resulting intermediate output data to the other output device (**column 1, lines 63-67; note that the first printer distributes or transfers the print job to the second printer based on the capabilities**), and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself (column 2, lines 7-10; note that when the second printer gets selected based on the capabilities, it submits the offer to the user to fulfill the print job or process the print job), the output device does output based on the received specialized output data (column 2, lines 1-4; note that the second printer processes or fulfills the requirements based on the received print job i.e. considered as output data).

Owa et al., Aoki and Perry are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data. The suggestion/motivation for

doing so would have been to have an efficient and reliable system that could be able to process print request without user selecting the appropriate printer. Such system also saves time (column 1, lines 24-32). Therefore, it would have been obvious to combine Owa et al. and Aoki with Perry to obtain the invention as specified in claim 12.

(12) regarding claim 13:

Owa et al. further discloses a computer having a program for an output device which communicably connects with a plurality of output devices (**1, 5, 2a, 2b, 2c, 2d, figure 1**), wherein the program makes the computer execute processes to be implemented as:

Owa et al. disclose all of the subject matter as described as above except for specifically teaching an intermediate output data receiving section for receiving intermediate output data, an inverse data conversion section for converting the intermediate output data received by the intermediate output data receiving section into specialized output data in an output format which can be output by devices of the same type as the computer, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data.

However, Aoki discloses an intermediate output data receiving section for receiving intermediate output data (**column 13, lines 65-67; note that the received image data gets converted to printing data**), an inverse data conversion section for

Art Unit: 2625

converting the intermediate output data received by the intermediate output data receiving section (**column 13, lines 65-67; note that the received image data gets converted to printing data**) into specialized output data in an output format which can be output by devices of the same type as the computer (**column 14, lines 2-3; note that the converted data gets printed by the printer device**), and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself (**column 13, lines 22-30; note that the print data is sent to the desired printer 40c which is designated to output the print data as also discussed in line 48-52**), the output device converts the received intermediate print data into specialized print data and does outputting based on the resulting specialized output data (**column 13, line 54-column 14, line 3; note that the outputting device i.e. printer 40c receives the image data and requests conversion process to printing data i.e. specialized data then outputs the printing data**).

Owa et al. and Aoki are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have an inverse data conversion section for converting the intermediate output data received by the intermediate output data receiving section into specialized output data in an output format which can be output by devices of the same type as the second output device, and if the output device receives intermediate output data which contains output conditions indicating that output should be done on the output device itself, the output device converts the received intermediate print data into

Art Unit: 2625

specialized print data and does outputting based on the resulting specialized output data. The suggestion/motivation for doing so would have been to efficiently acquire a desired output and utilize different output devices (column 7, lines 12-16). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 13.

Owa et al. and Aoki disclose all of the subject matter as described as above except for specifically teaching if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data.

However, Perry teaches if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device (**column 2, lines 1-7; note that if the first printer, or output device, is not capable to process the print job, it transfers it to the second printer based on a comparison result**), the output device transfers the resulting intermediate output data to the other output device (**column 1, lines 63-67; note that the first printer distributes or transfers the print job to the second printer based on the capabilities**), and if the output device receives specialized output data which contains output conditions indicating that output

Art Unit: 2625

should be done on the output device itself (column 2, lines 7-10; note that when the second printer gets selected based on the capabilities, it submits the offer to the user to fulfill the print job or process the print job), the output device does output based on the received specialized output data (column 2, lines 1-4; note that the second printer processes or fulfills the requirements based on the received print job i.e. considered as output data).

Owa et al., Aoki and Perry are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art if the output device receives specialized output data which contains output conditions indicating that output should be done on conditions indicating that output should be done on another output device, the output device transfers the resulting intermediate output data to the other output device, and if the output device receives specialized output data which contains output conditions indicating that output should be done on the output device itself, the output device does output based on the received specialized output data. The suggestion/motivation for doing so would have been to have an efficient and reliable system that could be able to process print request without user selecting the appropriate printer. Such system also saves time (column 1, lines 24-32). Therefore, it would have been obvious to combine Owa et al. and Aoki with Perry to obtain the invention as specified in claim 13.

5. Claims 14 and 15 recite the same feature as previously examined claims 1 and 2 except claims 14-15 are method claims. Thus, the arguments are similar to that presented above for claims 1-2.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki (US Patent Number 6,631,008 B2) and Owa et al. (US Patent Number 6,348,971 B2), and further in view of Perry (US Patent Number 7,102,778).

(9) regarding claim 9:

Aoki, a printer selection system which communicably connects a plurality of network printers with a print request terminal (**column 1, lines 61-65**) and selects one of the plurality of network printers in response to a print request from the print request terminal (**column 1, line 65-column 2, line 3**), wherein:

the print request terminal comprises an intermediate print data generating section for generating intermediate print data (**column 2, lines 4-6**), and an intermediate print data sending section for sending the intermediate print data generated by the intermediate print data generating section to one of the plurality of network printers (**column 2, lines 6-8**);

an intermediate print data transfer section for transferring the intermediate print data received by the intermediate print data receiving section to another network printer (**column 3, line 16-19**), an inverse data conversion section for converting the intermediate print data received by the intermediate print data receiving section into

Art Unit: 2625

specialized print data in a print format which can be printed by devices of the same type as the one network printer (**column 3, lines 20-32**), and a printing section for printing based on the specialized print data produced by the inverse data conversion section (**column 3, lines 34-39**); and

the intermediate print data transfer section operates based on predetermined printing conditions (**column 2, lines 9-15**).

and if the network printer receives intermediate output data which contains printing conditions indicating that output should be done on the output device itself (**column 13, lines 22-30; note that the print data is sent to the desired printer 40c which is designated to output the print data as also discussed in line 48-52**), the output device converts the received intermediate print data into specialized print data and does printing based on the resulting specialized print data (**column 13, line 54-column 14, line 3; note that the outputting device i.e. printer 40c receives the image data and requests conversion process to printing data i.e. specialized data then outputs the printing data**).

Aoki discloses all of the subject matter as described as above except for specifically teaching the network printer comprises an intermediate print data receiving section for receiving intermediate print data.

However, Owa et al. discloses the network printer comprises an intermediate print data receiving section for receiving intermediate print data (**column 13, line 65-67; note that the received image data gets converted to printing data**).

Aoki and Owa et al. are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to the network printer comprises an intermediate print data receiving section for receiving intermediate print data. The suggestion/motivation for doing so would have been to efficiently proceed with the desired printer and control the host to drive the selected printer (column 2, lines 20-25). Therefore, it would have been obvious to combine Owa et al. with Aoki to obtain the invention as specified in claim 9.

Aoki and Owa et al. disclose all of the subject matter as described as above except for specifically teaching if the network printer receives specialized print data which contains printing conditions indicating that printing should be done on printing conditions indicating that printing should be done on another network printer, the network printer transfers the resulting intermediate print data to the other network printer, and if the network printer receives specialized print data which contains printing conditions indicating that printing should be done on the network printer itself, the network printer does printing based on the received specialized print data.

However, Perry teaches if the network printer receives specialized print data which contains printing conditions indicating that printing should be done on printing conditions indicating that printing should be done on another network printer (**column 2, lines 1-7; note that if the first printer, or output device, is not capable to process the print job, it transfers it to the second printer based on a comparison result**), the network printer transfers the resulting intermediate print data to the other network printer (**column 1, lines 63-67; note that the first printer distributes or transfers the**

Art Unit: 2625

print job to the second printer based on the capabilities), and if the network printer receives specialized print data which contains printing conditions indicating that printing should be done on the network printer itself (**column 2, lines 7-10; note that when the second printer gets selected based on the capabilities, it submits the offer to the user to fulfill the print job or process the print job**), the network printer does printing based on the received specialized print data (**column 2, lines 1-4; note that the second printer processes or fulfills the requirements based on the received print job i.e. considered as output data**).

Owa et al., Aoki and Perry are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art if the network printer receives specialized print data which contains printing conditions indicating that printing should be done on printing conditions indicating that printing should be done on another network printer, the network printer transfers the resulting intermediate print data to the other network printer, and if the network printer receives specialized print data which contains printing conditions indicating that printing should be done on the network printer itself, the network printer does printing based on the received specialized print data. The suggestion/motivation for doing so would have been to have an efficient and reliable system that could be able to process print request without user selecting the appropriate printer. Such system also saves time (column 1, lines 24-32). Therefore, it would have been obvious to combine Owa et al. and Aoki with Perry to obtain the invention as specified in claim 9.

Conclusion

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore could be reached at (571) 272- 7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pari-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hilina S Kassa/

Examiner, Art Unit 2625

August 29, 2008

/King Y. Poon/

Supervisory Patent Examiner, Art Unit 2625

Application/Control Number: 10/747,814
Art Unit: 2625

Page 42